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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|-------------|----------------------|---------------------|------------------|
| 10/693,841 | 10/24/2003 | Mark Gregory Picha | 5659-21300/EBM | 9988 |
| 7590 04/07/2006 | | | EXAMINER | |
| DEL CHRISTENSEN | | | DANG, HOANG C | |
| SHELL OIL COMPANY | | | ART UNIT | |
| P.O. BOX 2463 | | | PAPER NUMBER | |
| HOUSTON, TX 77252-2463 | | | 3672 | |

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,841

Applicant(s)

PICHA ET AL.

Examiner

Hoang Dang

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-18 and 20 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Dubinsky et al (6,427,124) (Figure 4; column 11, lines 43-54; column 1, line 54 through column 2, line 14; column 2, lines 36-40; column 3, lines 20-64; column 7, lines 57-65).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubinsky et al '124 in view of Kuckes (US 5,589,775) or Kuckes (US 4,529,939) or Waters et al (US 5,230,387) or Kuckes (US 2003/0085059).

Dubinsky et al discloses the invention as claimed except for the step of using magnetic tracking to form or to assess an approximate location of a second opening from the first opening. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use magnetic tracking to form or to assess an approximate location of a second opening from the borehole of Dubinsky et al because it is well known in the art to use magnetic field tracking to assist in drilling a borehole toward, away or parallel to a target as evidenced by Kuckes '775 (see the abstract and figures 1-3 and 8) or Kuckes '939 (see the abstract and figures 1-2) or Waters et al (see the abstract and figure 1) or Kuckes '059 (see the abstract and figures 4-5).

5. Claims 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubinsky et al (6,427,124) (Figure 4; column 11, lines 43-54; column 1, line 54 through column 2, line 14; column 2, lines 36-40; column 3, lines 20-64; column 7, lines 57-65) in view of Tham (3,987,851) or Bridges et al (US 4,645,004) or Jeambey (US 4,817,711).

Dubinsky et al discloses the invention as claimed except for the step of heating at least a portion of the formation and pyrolyzing at least some hydrocarbons in the formation. However, it is well known in the art to heat and pyrolyze hydrocarbons in a formation to enhance the recovery of the oil therein as evidenced by Tham (e.g., column 1, lines 52-68) or Bridges et al (e.g., column 1, lines 25-29) or Jeambey (e.g., the abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat and pyrolyze some

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hydrocarbons in the formation of Dubinsky et al in view of the teaching of Tham or Bridges et al or Jeambey for the advantage pointed out above.

As for claims 25-30, Tham, Bridges et al and Jeambey teach controlling temperatures / pressures during the heating operation. It would have been obvious to one skilled in the art to use the temperature, pressure, and API gravity in the claimed ranges since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Specification

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

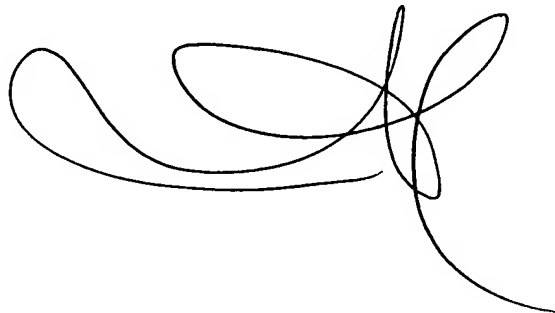
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Dang whose telephone number is 571-272-7028. The examiner can normally be reached on 9:15-5:45 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoang Dang
Primary Examiner
Art Unit 3672

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.